

## ABSTRACT

A CVD device has a reaction furnace (39) for processing a wafer (1); a seal cap (20) for sealing the reaction furnace (39) hermetically; an isolation flange (42) opposite to the seal cap (20); a small chamber (43) formed by the seal cap (20), the isolation flange (42), and the wall surface in the reaction furnace (39); a feed pipe (19b) for supplying a first gas to the small chamber (43); an outflow passage (42a) provided in the small chamber (43) for allowing the first gas to flow into the reaction furnace (39); and a feed pipe (19a) provided downstream from the outflow passage (42a) for supplying a second gas into the reaction furnace (39). Byproducts such as  $\text{NH}_4\text{Cl}$  are prevented from adhering to low temperature sections such as the furnace opening and therefore the semiconductor device production yield is therefore increased.